IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF OKLAHOMA

STATE OF OKLAHOMA, ex rel, W.A. DREW EDMONDSON, in his) capacity as ATTORNEY GENERAL) OF THE STATE OF OKLAHOMA, et al. Plaintiffs,) No. 05-CV-329-GKF-PJC vs. TYSON FOODS, INC., et al., Defendants.)

VOLUME 67 - AM

TRANSCRIPT OF NONJURY TRIAL PROCEEDINGS

DECEMBER 9, 2009

BEFORE GREGORY K. FRIZZELL, U.S. DISTRICT JUDGE

REPORTED BY: BRIAN P. NEIL, CSR-RPR, RMR, CRR United States Court Reporter

	7864
1	APPEARANCES
2	
3	For the Plaintiffs: MR. W.A. DREW EDMONDSON
4	MS. KELLY FOSTER Office of Attorney General
5	State of Oklahoma 313 N.E. 21st St.
6	Oklahoma City, OK 73105
7	MR. DAVID RIGGS
8	MR. DAVID P. PAGE MR. RICHARD T. GARREN
9	Riggs Abney Neal Turpen Orbison & Lewis
10	502 W. 6th Street Tulsa, OK 74119
11	MD DODEDE A NANGE
12	MR. ROBERT A. NANCE MS. KELLY FOSTER
13	Riggs Abney Neal Turen Orbison & Lewis
14	5801 Broadway Oklahoma City, OK 73118
15	MD LOUITG II DIII LOGIZ
16	MR. LOUIS W. BULLOCK MR. ROBERT BLAKEMORE
17	Bullock Bullock & Blakemore
18	110 W. 7th St. Suite 770
19	Tulsa, OK 74119
20	MR. FREDERICK C. BAKER
21	MS. ELIZABETH CLAIRE XIDIS MS. INGRID L. MOLL
22	Motley Rice LLC 28 Bridgeside
23	P.O. Box 1792 Mount Pleasant, SC 29465
24	
25	

		7865
1	APPEARA	N C E S (Cont.)
2	For Tyson Foods:	MR. ROBERT W. GEORGE
3	101 Tyson Toods.	Tyson Foods, Inc. 2210 West Oaklawn Drive
4		Springdale, AR 72701
5		MR. FRANK R. VOLPE
6		MR. MARK D. HOPSON MR. THOMAS C. GREEN
7		MR. JAY THOMAS JORGENSEN MR. GORDON D. TODD
8		ERIC J. IVES Sidley Austin LLP
9		1501 K St. NW Washington, DC 20005
10		,
11		MR. PATRICK MICHAEL RYAN Ryan Whaley Coldiron and
12		Shandy PC 119 N. Robinson, Rm 900
13		Oklahoma City, OK 73102
14		
15	For Cargill:	MR. JOHN H. TUCKER MS. THERESA HILL
16		Rhodes Hieronymus Jones Tucker & Gable
17		100 W. 5th St., Ste 400 Tulsa, OK 74103
18		MR. DELMAR R. EHRICH
19		MS. KRISANN KLEIBACKER LEE Faerge & Benson
20		90 S. 7th St., Ste 2200 Minnaepolis, MN 55402
21		· · · · · · · · · · · · · · · · · · ·
22	For Simmons Foods:	MR. JOHN R. ELROD
23		MS. VICKI BRONSON Conner & Winters
24		211 E. Dickson St. Fayetteville, AR 72701
25		<u>,</u>

7866 1 APPEARANCES (Cont.) 2 For Peterson Farms: MR. A. SCOTT MCDANIEL 3 MR. PHILIP HIXON MS. NICOLE LONGWELL 4 McDaniel Hixon Longwell & Acord PLLC 5 320 S. Boston, Ste 700 Tulsa, OK 74103 6 7 For George's: MR. GARY V. WEEKS 8 MR. WOODY BASSETT MR. VINCENT O. CHADICK 9 MS. K.C. TUCKER Bassett Law Firm 10 P.O. Box 3618 Fayetteville, AR 72702 11 12 For Cal-Maine: MR. ROBERT SANDERS 13 Young Williams P.A. P.O. Box 23059 14 Jackson, MS 39225 15 MR. ROBERT P. REDEMANN 16 Perrine McGivern Redemann Reid Berry & Taylor PLLC 17 P.O. Box 1710 Tulsa, OK 74101 18 19 20 21 22 2.3 24 25

Wednesday, December 9, 2009

* * * *

2.3

THE COURT: Before we begin this morning, the attorneys may have noticed that I'm trying to deal with whatever motions have arisen during the course of the trial. There's one left. It's the state's motion for reconsideration of the court's September 4, 2009, minute order which deals with Section 427B, and you'll recall the long discussion we had with Mr. Baker and Mr. Bullock and Mr. Jorgensen.

And as I'm sure you've all experienced, it's an interesting profession that we're in, insofar as a new day may dawn and you may see things in a different light. It seems to me that it may have been error for the court to preclude the plaintiff from attempting to put on any evidence with regard to that particular theory. It does not mean that the court may not ultimately interpret 427B in the fashion that it did, but I am concerned because we don't want to try this over again, if we don't have to.

It seems to me that I need to give the plaintiff the opportunity to present whatever evidence it wishes to present -- I think Mr. Baker was the point man here -- with regard to this foreseeability

argument.

2.3

The plaintiff has shifted ground a bit in the motion to reconsider from the previous motion, insofar as I think at least one time the plaintiff in the motion to reconsider reads this phrase: "One who employs an independent contractor to do work which the employer knows, or has reason to know, to be likely to involve a trespass."

I think at the time of the hearing we talked about employment of these independent contractor growers to do the work of growing chickens. And unless I'm mistaken, I think at least one point the reference to "do work" was to do work of disposing of poultry waste. I'm not sure that's the case here.

But even if we don't go that far, Mr. Baker's foreseeability argument potentially allows the application of 427B, even when an independent contractor, for instance, hires another independent contractor to dispose of the waste. And it should not be a safe harbor under 427B for the independent contractor then in turn to do that which was foreseeable from the integrator's standpoint.

So I'm going to grant the state's motion for reconsideration, which is No. 2623, to allow whatever evidence the state wishes to present to the court with

regard to its theory under 427.

and I know it comes late, but as you point out, Mr. Baker -- and Ms. Moll, I think, may have written this brief. I don't know. Mr. Baker. As you point out, Mr. Baker, these motions in limine may be reconsidered at any time, and I think it's important to do this now before the close of plaintiff's case to allow you to present whatever additional evidence you wish. You may not wish to present any additional evidence with regard to that because you may be satisfied with that which has already been presented. In any event, No. 2623 is granted.

All right. Let's proceed.

MR. ELROD: May I approach the witness, Your Honor?

THE COURT: You may.

MR. ELROD: Your Honor, I move for introduction by stipulation Defendants' Joint Exhibit 98, which is the 2009 Lake Tenkiller Visitor's Guide.

THE COURT: There is no objection?

MR. PAGE: It's the Christmas season,

Your Honor. No objection.

THE COURT: May the spirit spread.

Joint Exhibit No. 98 is admitted.

MR. ELROD: Thank you, Counsel.

CROSS-EXAMINATION

BY MR. ELROD:

2.3

- Q. Dr. Welch, my name's John Elrod. I'm not sure whether we've met or not, but I don't think I was --
 - A. I'm sure I heard your name.
- Q. It's nice to -- I've heard your name too.

 It's nice to meet you, sir.

I've handed you a document entitled: "2009 Visitor's Guide for Lake Tenkiller." I'd like to ask you some questions to see whether you disagree or agree with some of the statements in here regarding fish.

- A. Okay.
- Q. If you'll look at the inside front cover -- actually it's page 4 in the lower left-hand corner -- you'll see, sir, that this publication was put together by an entity called the "Greater Tenkiller Area Association," something like that -- I butchered it -- but the Greater Tenkiller Area Association.

 They have board members, including Ed Brocksmith and a number of other people, and that it's produced in cooperation with the Oklahoma Tourism and Recreation Department, 75,000 copies printed.

Do you see where I'm reading that, sir?

A. Yes.

2.3

Q. Okay. Now, understanding, of course, that this is not a scientific journal, I'd like to ask you some questions about statements made on page 51, 5-1, which you'll find in the lower right-hand corner.

Before we get into the reading of this,

Dr. Welch, are you aware that the state record

smallmouth bass was caught within the last couple of

years in the Horseshoe Bend area of Lake Tenkiller?

- A. I've heard that.
- Q. And do you suppose he grew up there or she grew up there or do you think somebody put it there?
- A. I think it probably grew there. But no, I don't think anybody put it there. When they stock smallmouth, they're small fish.
 - Q. Okay.
 - A. Nobody could afford to plant large fish.
- Q. Thank you. Now, let's talk about crappie.

 It says here, "Crappie fishing is usually best in the spring as the fish prepare for spawning. Look for small pea-gravel-type banks and shallow Willow trees. During the hot summer months, crappie can be found in deep water about 25 to 40 feet deep. In the fall, crappie move back to the shallow waters and can be found around submerged brush. Crappie can be caught

from one of the heated fishing docks around the lake in the wintertime."

Do you agree that the statement regarding crappie behavior in this visitor's guide is possible in Lake Tenkiller?

A. Yes. In certain parts.

2.3

- Q. Okay. Now, moving on to white and striped bass, white bass --
 - A. Just a minute. What were the depth ranges?
- Q. Twenty-five to forty feet in the hot summer months.
 - A. All over the reservoir or --
- Q. All I know is what I'm reading in this document, sir.
- A. I'm trying to think what the -- in some parts of the reservoir, I think that's possible.
- Q. Moving on to white and striped bass, "White bass, or sand bass, (sandies), provide excellent fishing opportunities in the spring as they head for the upper Illinois River to spawn. From Carter's Landing to Horseshoe Bend is an excellent area to catch the spring run. During the summer months, the sandies begin to school. Areas near Cookson, Chicken Creek, and Snake Creek are good choices."

Now, do you agree that that kind of behavior

by sand bass, sandies, as described in this visitor's quide is possible in Lake Tenkiller?

- A. Is -- there's no scientific names in here so

 I don't know what -- there's a picture that could

 be --
- Q. I think that's a picture of a striper but I could be wrong.
- A. Yeah, it's a striped bass. Well, they stock striped bass in --
 - Q. Okay.

2.3

- A. Well, can I comment or --
- 12 Q. Sure. Go ahead.
 - A. They stock striped bass but they haven't taken. So I've seen -- I've seen this advertisement about striped bass, if it's the marine species that they've stocked in a number of reservoirs around the country. It's not a good fishery in Tenkiller, to my knowledge.
 - Q. Are you aware that the state-record striped bass was caught in Lake Tenkiller?
 - A. No, I'm not.
 - Q. Forty-eight pounds, something like that?
 - A. I can say the water quality that exists in Lake Tenkiller is not good for striped bass. There are several reservoirs in the country that show that

if striped bass have to live in water that's more than 24 degrees centigrade, or even more than 20 degrees centigrade, and the oxygen content --

- Q. Can you give that us to in Fahrenheit?
- A. Twenty degrees centigrade is 68.
- Q. Okay. So you're saying that the water has to be above 68 degrees for striped bass to live?
- A. Yeah. Below, below. Because what's been shown is if they grow in this stressed -- if you have them in a stressed environment and they reproduce, the young are abnormal.
 - Q. Okay.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

2.4

- A. There's a high survival. It's amazing. But this study has been done in Tennessee where the striped bass existing in stressed, squeezed conditions have produced damaged young; that is, they're abnormal and have low survival rates.
- Q. Now, I'm about to correct something I just told you, and I'm sorry if I misled you.

How cold is the water that comes out from the penstock?

- A. It's probably 15 degrees.
- Q. Celsius?
 - A. Celsius.
- Q. Less than 20? So it's colder?

- A. So 10 is 50, so you add -- so it's about 60.
- Q. Now, here's where I made a mistake. The next paragraph, sir, says, "Striped bass are caught below Tenkiller dam in the Lower Illinois River and Arkansas River near Gore and Marvel Resort. Striper fishing is tremendous year-round with the lower Illinois River" -- that would be the area below the dam -- "producing the state-record 47-pound 8-ounce striper."
 - A. That's cool.
 - Q. Your testimony is that's not possible?
- 12 A. No.

1

2

3

4

5

6

7

8

9

10

11

13

14

15

16

17

21

- Q. That water's 15 degrees Celsius, you just said.
 - A. Yeah. That's fine.
- Q. I thought it had to be warmer than 20 for stripers?
- 18 THE COURT: Below.
- A. No. It can't be warmer; it has to be colder.
 - Q. (BY MR. ELROD) Okay. I'm sorry. My mistake.
- A. They can't take the warm temperature.
- 24 THE COURT: The striper fishing is above 25 Arkansas River up to the dam.

MR. ELROD: Yes. Right. Sounds like a man of experience, Your Honor.

THE COURT: Yes, sir.

Q. (BY MR. ELROD) Talk about large and smallmouth bass for a second.

2.3

"During the summer months, largemouth bass move to deeper water. Night fishing to popular due to the heavy day use on the lake. Smallmouth bass provide some scrappy fighting in the summer. Most successful areas to catch smallmouth bass are in the Upper Illinois River and Baron Fork Creek. Largemouth bass return to the shallows as water temperatures start to cool down in the fall. In the wintertime, largemouth bass seek deep water."

Now, do you agree, sir, that the behavior described here for largemouth bass and smallmouth bass is possible in Lake Tenkiller?

- A. Well, I'd have to know what the temperatures are. But the fact that -- let's see. Yeah, they're in the river. That's fine. It's cool, cool enough for them.
- Q. Now, if you'll turn the page, sir, there's a blurb in here that was mentioned very briefly yesterday; that is, the Field & Stream ranks Tenkiller and the Illinois as the 16th best fishing in the

United States. Do you see that?

A. Uh-huh. Well --

2.3

- Q. What are your thoughts about that given your testimony?
- A. -- I showed yesterday -- or I talked about the quality fishing of largemouth and it's double -- it's 88 per hour, the catch rate in Tenkiller, and the quality fishery level is 40 so it is a good fishery. And I used that as an example of largemouth liking eutrophic conditions. So more food so -- right. I mean, I'm not denying that largemouth fishing is good in Tenkiller. This doesn't specify smallmouth as being in the 16th best fishing.
- Q. Well, it does. It says -- if you look on the left-hand column about halfway up, the written part --
- A. Let me -- I got to get the hard copy. I can't read that. Oh, okay. Fine.
- Q. It says, "Tenkiller to the south and Gibson to the north" -- "as well as some pleasant surprises, like trout fishing and exceptional smallmouth bass fishing in the Illinois River. At least it talks about smallmouth bass in the Illinois."
- A. Yeah. You know, eastern Oklahoma is the farthest original range of smallmouth bass. There were no lakes here originally before you built

reservoirs and so they were stream fish.

Q. Right.

2.3

- A. So they existed from the Great Lakes to

 Connecticut -- I mean, to Quebec and a little bit east
 and then down in the Tennessee and into eastern

 Oklahoma. Largemouth have a much wider distribution.

 But, you know, that's written -- it was written in

 1949.
 - Q. Right.
- A. Smallmouth bass like clear, cool water with rocky substrates, whether it's in streams or lakes.
 - Q. They like streams?
 - A. They're very picky.
- Q. They're naturally a stream fish, aren't they?
- A. In the ichthyology texts, it says streams as lakes. In Michigan, which I'm very familiar with, northern Michigan, it's smallmouth. Northern Michigan has oligotrophic lakes. Southern Michigan has mostly eutrophic lakes; it's largemouth. Smallmouth do not like eutrophic conditions.

Studies in reservoirs in Kentucky show that smallmouth distribute in the lower part of the reservoir where it's more oligotrophic conditions.

They don't like the upper part; they're not found

there.

2.3

2.4

- Q. But the largemouth bass, per your testimony, thrive in Lake Tenkiller?
 - A. Yes.
- Q. And that's where the -- those are the fish that these Wal-Mart fishing tournaments gives hundreds of thousands of dollars of prizes to winners. That's what those fishing tournaments are all about, largemouth bass?
- A. Yeah. If they could catch smallmouth, they'd be smallmouth because they're better, they're scrappier.
 - Q. You're just not going to give up, are you?
- A. That's my opinion. Well, I fish-farm and I know what they do. I caught both largemouth and smallmouth, and smallmouth, they pack it.
- Q. I coined the term yesterday during your testimony called species envy. I mean, if you're a carp, you're happy to be a carp, are you not? I mean, if you're a catfish, you're happy to be a catfish. I mean, what's the deal? What gives us the right to judge whether a smallmouth bass is better than a carp?
- A. Humans have too much power, absolutely, over nature.

7881 Q. You're right. I think I'll sit down. 1 Thank 2 you. 3 THE COURT: Do we have any catfish 4 fishermen here? 5 Any further cross-examination? 6 MR. JORGENSEN: Not from us. 7 THE COURT: Mr. Tucker, saw you in the 8 paper today. 9 MR. TUCKER: Sorry, Your Honor. I want 10 to keep you looking forward to the next thing to come. We always have to have something to look forward to; 11 12 right? 13 THE COURT: I don't have any work to do 14 here. 15 MR. TUCKER: I know. I've been feeling 16 pretty sorry for you at your caseload; you've just had 17 one case all fall. I can't imagine what the other 18 judges must think. 19 May it please the court. 20 **CROSS-EXAMINATION** 21 BY MR. TUCKER: 22 Sir, my name is John Tucker. I think you and 2.3 I said "hello" in the hallway the other day, but my 24 partner, Ms. Hill, who you do know.

United States District Court

Hi, Mr. Tucker.

25

Α.

Q. Nice to see you, sir. There's no way I can follow the act that you just were entertained by, but I did want to ask you a couple of follow-up questions sort of on the same line.

And for purposes of just letting the record be more fulsome, I'll hand you over what I've marked for identification as demonstrative -- or Defendants' Demonstrative 276.

- A. This looks like that, about a six- or seven-pound smallmouth.
 - Q. I hope to put a little flesh on --
- A. Well, you never can tell how far they're holding it out in front of them.
- Q. I hope to put a little flesh on Mr. Elrod's story there, if I might, and represent to you that if you look at that, that's the lake record for the smallmouth bass. Do you see that, sir?
 - A. I do.

2.3

- Q. And can you determine what lake that was caught in from the Department of Wildlife Conservation's printout there?
 - A. No, I can't. But I guess it's Tenkiller.
- Q. Look right below the picture, the second line below the photograph of --
 - A. Tenkiller, right. Okay.

Q. You'd think that man would have a bigger smile on his face, wouldn't you, for catching that fish.

Do you know --

- A. Oh, he's smiling internally, I'm sure.
- Q. There you have it. And do you notice that fish was also released and returned to the lake?
 - A. That's the right thing to do.
- Q. And it was caught during a tournament. If you'll turn the next page, it shows you where and when it was caught. Can you look at that for me, please?
 - A. Date caught, area caught, Snake Creek.
- Q. All right. Now, are you familiar where Snake Creek is?
- A. No.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

20

21

- Q. And when was it caught, sir?
- A. April 25th.
- 18 Q. Of this year?
- 19 A. 2009, yeah.
 - Q. All right. Now, yesterday you'll recall the judge asked you some questions about the dendritic nature of this lake and other lakes in Oklahoma?
- 23 A. Right.
- Q. And you said that probably those coves provide good fishing habitat?

A. Right.

2.3

- Q. And Snake Creek, I'll represent to you, is one of the coves on Lake Tenkiller, so this is might be a demonstrative of that kind of good fishing habitat you were talking about --
- A. That's right. Especially in April when the temperatures are low.
- Q. Now, you didn't do any -- but that fish has to live in the lake year-round, he doesn't get to holiday someplace else in the middle of summer, does he?
- A. Well, he may decide that there's not much habitat here with this cool water and slip up into the rivers where there is cool water.
- Q. I mean, he doesn't take a strip to Colorado to cool off? I mean, that sounds facetious, but that is his habitat --
- A. They can do that. They can migrate into the rivers if the conditions are bad in the lake.
- Q. The lake and the river is his habitat; is that right?
 - A. What?
 - Q. The lake and the river would be his habitat?
- 24 A. Yes.
 - Q. All right. And in that habitat, this fish

obviously has flourished for quite some time?

- A. That's true.
- Q. And when you took tests -- or the tests that you used for the opinions that you gave, those results came from the channel of the lake, didn't they?
 - A. Yes.

2.3

- Q. Now, you didn't have matching tests from the various coves such as Snake Creek; is that right?
- A. No, we didn't go into Snake Creek. But we did do cross-sectional measurements of profiles of dissolved oxygen and temperature, and these profiles lay right on top of each other. So I'm confident that the thermocline is stable horizontally in lakes and reservoirs and that that thermocline extends to the shore, wherever that hits, and that eight to ten meters below that in July and August and September, there's not going to be any oxygen.
- Q. But can't we agree that for whatever reason this habitat has proved pretty favorable to that particular fish?
- A. Well, you know, he caught it in -- he caught it in April, the temperatures are lower, smallmouth grow in the spring, and it's the summertime when they -- when they go into deep water. Whether the temperature is limiting or not, they like to go to

deep water.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

18

19

20

21

22

2.3

24

- Q. Sir, is that a young fish?
- A. What?
 - Q. Would that be a young smallmouth bass?
- A. No. I --
 - Q. How old would a fish that size be, a smallmouth bass, based upon your ichthyology expertise?
 - A. Well, it could be six, seven years, I'd say.
 - Q. And just -- I don't mean to speak the obvious, but that means that fish has been around for six or seven summers; right?
 - A. Yeah.
 - Q. So that fish found some way to apparently thrive for six or seven summers?
- 17 A. That's right.
 - Q. All right. Now, when you did your study, sir, the pike and the striper that you talked about, neither of those are native fish, are they, native to Oklahoma?
 - A. True.
 - Q. And Oklahoma and other states have over the years experimented with stocking fish from other regions to see if they would do well; is that right?

A. True.

2.3

- Q. And as you pointed out, up until the middle of last century, or perhaps maybe the '20s or '30s, Oklahoma didn't have any lakes at all, did they?
 - A. True.
- Q. This was a stream and river state, then the government came along and dammed everything up and now we have reservoirs?
 - A. Yeah, that's true.
- Q. And so the Department of Wildlife decided, well, let's see what else we can try stocking that didn't live in our streams that people might enjoy fishing that increase recreation; is that right?
- A. It appears that that's what went through their heads, yes.
- Q. And are pike and stripers the only fish that the Department of Wildlife has attempted to stock since the '30s, 1930s?
- A. No. They stocked smallmouth bass and the stocked largemouth bass.
- Q. Let me rephrase that. Only species they've attempted to introduce?
- A. There's trout in -- in the tailrace area, I understand, and I do not think trout were native here to begin with, but, you know, it's possible but I

don't think so.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

2.4

- Q. And sometimes when you stock non-native fish, it works and sometimes it doesn't; is that right?
 - A. That's true.
 - Q. Like the spotted bass, is that a native fish?
- A. I think spotted bass were in the river before the dams were built.
 - Q. The Florida --
- A. But I'd have to go back and check that publication, but I'm -- I'm -- if I had to say yes or no, I think they were.
- Q. And when you stock fish that aren't native to a region, when you bring them into a place they've never been, in some reservoirs they do great and some reservoirs they survive and in some reservoirs they just aren't thrifty at all; isn't that right?
 - A. Yes.
- Q. And to go back to the old commercial, that's kind of what happens when you tamper with Mother Nature, sometimes it works and sometimes it doesn't; right?
- A. It isn't chance necessarily, just chance.

 The habitat makes a huge difference in who survives and who doesn't survive.
 - Q. And you've talked a lot about survival and

about the bountiful largemouth fishery at Lake Tenkiller.

As a part of your analysis, did you meet with the stakeholders who are most interested in your topic of adverse impact on the Tenkiller fishery to confirm your opinions?

By "stakeholders," let me tell you who I mean before you answer the question. Did you meet with any fishermen?

A. No.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

24

- Q. Did you meet with any of the fishing guides that operate at Lake Tenkiller or on the Illinois River?
- A. No.
- Q. Did you meet with any of the Department of Wildlife Conservation game rangers?
- A. Game rangers, no. Through Dr. Gendusa, we contacted the fisheries biologists in the Department of Wildlife Conservation.
- Q. As to the people that are actually using the lake, though, you didn't talk to any of them?
 - A. No.
- Q. Would their opinions of how fishing is be available to confirm or invalidate your opinion?
 - A. Well, in my experience dealing with fisheries

in reservoirs, I never got very good information from the public. They always wanted information from me and I -- I'm not saying it's not possible, but I'm a fisherman and fishermen tell lots of lies.

Q. There is a certain level of exaggeration,
I'll admit. Fish do seem to grow quite a bit once
they got into your memory and out of your sight.

But in any event, you made no effort to contact any of the actual stakeholders who use that lake to determine whether their belief is that fishing is getting better or getting worse?

A. I did not.

2.3

- Q. All right. Now, again, you have made an analysis, a scientific analysis, and you've talked to us about temperature, you've talked to us about the plunging river, and I'm assuming the river plunges all over the lake, including in Snake Creek, this river diving down and --
- A. Well, I don't know how deep Snake Creek is in that inlet. So if -- you know, if it's in the metalimnion area, yeah, it could be move out into the -- into the cold --
- Q. You told us all about that. As a matter of theory, it's obvious that this is -- you tell us that that is a challenged fishery; is that correct?

- A. I'm telling you that the growth of cool water species is inhibited --
 - Q. All right.

1

2

3

4

5

6

7

8

9

15

16

19

20

21

22

2.3

- A. -- from the standpoint of oxygen and temperature.
- Q. Okay. Do you know whether the people that use the lake are pleased with the fishing there?
- A. I would guess they probably are judging from the derbies with the largemouth and all that.
- MR. TUCKER: I think that's all I have.

 11 Thank you.
- 12 THE WITNESS: Thank you.
- THE COURT: Thank you. Any further cross-examination?
 - MR. TUCKER: I'm sorry. I have one more, Your Honor.
- A. Do you know what the age of that smallmouth is?
 - Q. (BY MR. TUCKER) No, sir. They returned him to the water so we can't really tell.
 - I want to further validate Mr. Elrod's tourist publication with Demonstrative Exhibit 277, if I may. Looking at Demonstrative 277, can you identify what kind of fish that is?
- A. Well, it says it's a striped bass.

Q. Okay.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

24

25

- A. It looks like a striped bass.
- Q. As we talked yesterday, we call those -- so we just don't get confused, we call those stripers.
 - A. Okay.
 - Q. Striped bass, you go to the restaurant and you get it and it comes from the East Coast someplace.
 - A. Okay.
 - Q. A striper we catch here.

Does that appear to be the record fish that Mr. Elrod was talking about?

- A. Sure could be.
- Q. It's the right weight, isn't it, 47 pounds, 8 ounces?
 - A. Yeah. It looks like it would be that much.
 - Q. And that's a happy fisherman on the outside too; correct?
- A. Yes.
 - Q. And that fish shows it was caught on the lower Illinois in 1996; is that right?
 - A. In June 1996.
- Q. So in June of '96, we have a record striper, and then in April of 2009, we have a record smallmouth, all in connection with this fishery; is that correct?

A. Yes.

1

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

24

25

2 MR. TUCKER: Thank you.

THE COURT: Any further cross?

Mr. Page.

MR. PAGE: Thank you, Your Honor.

REDIRECT EXAMINATION

BY MR. PAGE:

- Q. Dr. Welch, I want to ask you some questions concerning your testimony yesterday on cross-examination.
 - A. Okay.
- Q. Do you recall some questions about the lack of -- or at least the fewer data that you had in Broken Bow concerning DO, do you believe, sir, that you had enough data to assess Broken Bow Lake's DO level and compare it with Lake Tenkiller?
 - A. I do.
- Q. Would you please explain to the court why you believe that is the case? And if you want to look at some of those DO profiles --
- A. Well, I can first say that the progression of dissolved oxygen in a reservoir or a lake each year is pretty similar, especially in the hypolimnion. One could confidently look at a couple of profiles during the same time in one reservoir and the same time in

another reservoir, and if there's enough difference in those you can be -- you can feel fairly certain that that difference is real. I think that's the case between Broken Bow and Tenkiller, even though there's fewer data -- data points.

- Q. Okay. Could you use the data that we have here before the court and explain that or --
 - A. I can.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

2.4

- Q. Can you demonstrate that from the data that's on the Oklahoma exhibits that you've looked at?
 - A. I can.
 - Q. Okay. Which exhibits do you want to look at?
- A. Whatever one they're -- I don't know what the numbers are.
- MR. PAGE: May I approach, Your Honor?

 THE COURT: You may, sir.
 - A. Can you hand them to me?

 (Discussion held off the record)
 - A. Okay. 728 and the last one, 721.
 - Q. (BY MR. PAGE) Okay. Dr. Welch, looking at -- those are -- just to make the record clear, those are the DO profiles for Lake Tenkiller, that's 721, and 728 is the profile for Broken Bow; correct?
 - A. Yes.
 - Q. Okay. Could you explain to us, sir, how this

2.3

data would show you had sufficient information to be able to compare these lakes?

A. Well, if I picked a similar time in July and August, I think they'd be comparable. So if we look, say, at the end of July, July 26th, and August 9th, those two profiles in Tenkiller, you'll see that there's a small part of the hypolimnion that has DO concentrations of one or less; the rest of it, they're less than a half in those months.

If you look at Broken Bow, say, during August 13th and July 18th, even though they're in different years, these are similar profiles, and you'll notice in the whole hypolimnion those concentrations are above 4 milligrams per liter.

So that's why I say that you can compare these two bodies of water.

- Q. Okay. Now, Dr. Welch, do you recall -- and we've touched on this a little bit this morning also, I think -- but do you recall questions yesterday concerning habitat -- available habitat for game fish and where you were asked about whether you evaluated prey and predator circumstances?
 - A. Right. I was.
- Q. Can you explain the prey and predator differences between Broken Bow and Tenkiller?

2.3

2.4

A. Well, here's my thinking on that. We just heard how successful the largemouth fishery is in Broken Bow. They're both predators, they eat foraged fish, both smallmouth and largemouth. And my thinking is, if the largemouth can grow fat and sassy in Tenkiller eating prey — and they prefer minnows, they will eat sunfish — then smallmouth can eat the same thing. Smallmouth also like crawfish and — but a largemouth will eat crawfish too.

So if the largemouth are doing well, I see there's no reason why there's not enough prey for smallmouth in Tenkiller. And if the — if the survival of largemouth fry and juveniles is satisfactory in Tenkiller to, you know, build a population — build a fishery, then the predation rate on smallmouth shouldn't be any greater than the predation rate on largemouth.

So that's how I would look at the comparison of predator/prey problems.

- Q. And do you have an opinion as to whether or not there's a factor that's involved in Lake

 Tenkiller's water quality that affects smallmouth's ability to effectively consume food?
- A. Well, I think if they -- yes. I mean, there's a -- here's the way you have to look at it.

2.3

You can have some survival of fish. As we just saw, probably these fish are using -- using the river during the cool times and the reservoir -- in the summertime when it's cooler and the reservoir when it's cooler in the spring, and most of the -- and a lot of the growth occurs in the spring. And if -- you could look at it this way.

If there were oxygen in the hypolimnion down, you know, below 8 to 10 meters, then you've got a lot more habitat for these fish to exist in rather than squeezing them into whatever possible nooks and crannies may exist or into the stream, and it's possible to grow a large fish.

But if you looked at the production per unit area of the reservoir, my estimate would be the production would be higher if you had that habitat available with oxygen in it so that there's more space. And, in fact, that is — that is the basis for which — from the standpoint of fisheries, aeration is applied in bodies of water that don't have enough oxygen. The justification is, you're increasing the habitat in which these fish can thrive.

- Q. Okay, sir.
- A. Not $\--$ not restricting them to small $\--$ small parts of the habitat.

Q. Dr. Welch, do you recall yesterday some questions addressed to you concerning the reliability of the CDM data that was collected for you for both DO and temperature?

A. Yes.

2.3

2.4

- Q. Do you believe that the data that you obtained from CDM was reliable and valid to base your opinions in your report?
- A. I believe it's valid. I would not have put it in my report if I did not think it was valid.

Now, when Cooke and I went out with these -- with Brian Bennett and Drew Santini, we gained a lot of respect for these fellas. We thought that they were hard-workers and careful. And subsequent experience with their knowledge of where the data are and how they can present it to us, we had a lot of good service from these guys and we -- Denny and I insisted that they take Winkler measurements.

That is an old, tried and true wet chemical determination for oxygen, and it's the basis — a lot of people don't want to mess with it anymore, they want to trust their standardization of the oxygen probe without double-checking it against the wet method, but we insisted that they did.

We never heard back from them that there was

any problems and they continued to do that, as far as I know, and double-checked that data, and it looks to me like these data are valid.

- Q. Now, Dr. Welch, during this investigation, did you ever discover any data that you felt was invalid?
- A. Dr. Cooke has already described the Corps of Engineers phosphorus data. But when we first started on this project, the May samples for total phosphorus came in and they were too high. I was really suspect that these -- that we were getting bad numbers and --
 - Q. This is May of 2005?
- A. 2005, May of 2005. So we didn't have any data from May of 2005 because we threw it out and we changed laboratories. We changed laboratories to the -- to the one in Seattle that I have confidence in, and so there was no doubt in my mind about phosphorus after that.
- Q. Do you remember the questions that have been addressed to you about whether or not Broken Bow Lake was a good reference lake for Lake Tenkiller?
 - A. Do I remember questions about it?
 - Q. Yes.

2.3

2.4

- A. Yes, I do.
- Q. Okay. Do you have an opinion as to whether

or not Broken Bow Lake is a good reference lake?

- A. I think it's a good reference lake.
- Q. Why is that, sir?

2.3

2.4

A. Let me wet my whistle here.

Well, I've already said that the morphometric characteristics of Tenkiller and Broken Bow are similar. They're steep-sided basins. The mean depths are fairly similar. Broken Bow is a little deeper, it's a little over 19 meters, and Tenkiller is -- excuse me -- 15.6 meters. There's some other -- and the areas are similar, very similar, something over 50 square kilometers a piece.

There's some other things that you can look at. I calculated the volume in each lake below 6 meters, and one is 88 percent of the volume, the other is 86 percent of the volume. And I calculated the volume of the hypolimnion, and Broken Bow has -- I think Broken Bow has 43 percent and Tenkiller 40 percent or it might be the reverse.

These are very, very similar basins and should provide rocky drop-off areas for smallmouth bass to inhabit and walleye. Walleye need gravelly bottoms as well.

Q. Now, was there one factor in particular that was important to you in selecting Broken Bow as a

reference for Lake Tenkiller?

2.3

2.4

- A. Well, as Dr. Cooke has emphasized, the basis the important thing, aside from these other characteristics, is that the inflow concentration over a three-year period was 27 micrograms per liter and the range was 15 to 38.
- Q. You're talking about phosphorus, total phosphorus?
- A. I'm talking total phosphorus entering through Mountain Fork River into -- into Broken Bow Reservoir. In Tenkiller, there was a nine-year average of 166.

 Now, this is spring through summer, not the annual.

 I've told you before the annual volume-weighted inflow to Tenkiller is 220-something, 227.

We don't have a full year of data in Broken Bow so we can't -- can't compare 227 against 27, so we're comparing it 166 against 27.

- Q. Now, on this similar topic of comparing reservoirs and watersheds, do you recall -- I think it was Mr. McDaniel's questions to you yesterday -- concerning whether watershed-to-lake-area ratios can explain the differences between Broken Bow and Tenkiller's trophic state? Do you recall that discussion?
 - A. Right. I do.

MR. MCDANIEL: Excuse me, Your Honor. 1 That discussion was with Dr. Cooke. I didn't ask 2 3 those questions of Dr. Welch. 4 MR. PAGE: Your Honor, my recollection 5 is this same Tyson defendant exhibit was used for 6 both --7 THE COURT: My recollection is that 8 someone asked a question of Dr. Welch of that. don't know that it was Mr. McDaniel but someone did. 9 10 MR. PAGE: Might have been 11 Mr. Chadick. 12 THE COURT: Yes, it was. Very briefly 13 but he did ask. It was Mr. Chadick. 14 Overruled. Go ahead. 15 Q. (BY MR. PAGE) Okay. Do you believe that 16 those ratios -- that watershed-to-lake-area ratios 17 explain the difference in the trophic state between --18 I do not think that. Α. 19 Ο. Why is that? 20 One can think of a way to look at that 21 problem assuming that the land uses are the same in 22 the two watersheds, and the only difference is the 2.3 watershed-to-lake-surface ratio. 2.4 So right away you'd think that, well, the

watershed is double in Tenkiller what it is in Broken

2.3

2.4

Bow, so there's going to be double the loading if the land uses are the same. And that's okay in terms of -- that's probably a reasonable assumption in terms of kilograms of phosphorus coming in per year.

However, that doubling of the watershed in Tenkiller also means it's the doubling into the water runoff. So if one is interested in what the inflow concentration would be, the volume-weighted inflow concentration, which is what determines the phosphorus concentration in the lake which is what determines the concentration of algae, then you've got to divide that loading by volume. And if you do that, even if the runoff is say 4/10 or 5/10 of the total rainfall, you come out with the same concentration if the land uses are the same. So double the watershed area does not explain the difference in concentrations 27 versus 166.

- O. Between the two reservoirs?
- A. Between the two reservoirs.
- Q. Okay, sir. Do you recall the question about whether land use in and of itself explains the difference between Broken Bow and Tenkiller phosphorus?
 - A. Yes, I do.
 - Q. Do you believe that that provides an

explanation for the different trophic states?

2.3

A. Not if you look at land use as it's been studied, different types of land use, such as urban runoff. I've done this. I've studied in many lake situations urban runoff, pasture, forest, high density, low density, urban runoff.

What people use to do that -- and I've done that myself -- is you go in -- it's complicated to figure out how much phosphorus is coming from what kind of land use, but there's a lot of published data showing that there are runoff coefficients or yields in terms of mass of phosphorus coming off the different kinds of land uses per year.

But in addition to yields, there's been EPA surveys, and one was -- some of these results were published by EPA, Omernik -- McDowell and Omernik in 1979, for example.

MR. MCDANIEL: Your Honor, I object.
This is getting into hearsay, Your Honor.

THE COURT: Sustained.

- Q. (BY MR. PAGE) Would you just explain your analysis of Broken Bow and Tenkiller?
- A. Okay. I took representative stream runoff concentrations from different land uses, and I can specify those. On average, forest land use yields

water runoff with about 18 micrograms per liter on average. Rangeland that is -- or land use that has more than 50 percent rangeland is something like 34 micrograms per liter.

MR. MCDANIEL: Excuse me, Your Honor. I have to object to this because this specific analysis here I don't believe is set forth in Dr. Welch's report.

THE COURT: Overruled. He's giving an overall perspective on land use and how it might affect trophic states.

Go ahead.

2.3

2.4

(Discussion held off the record)

A. So these are typical values. They range — they vary from one site to the other, the standard deviations around these numbers. But 18 from forest, 34 from rangeland, and 92 from urban runoff.

I've studied urban runoff. The urban runoff around Seattle has got about 100 micrograms per liter in it on average.

If we apply those to the land uses in the two watersheds and weight them for the land area in those two watersheds, you come out --

MR. MCDANIEL: Your Honor, this is an application to the specific watersheds at issue, Your

Honor. This is not a generalization. This is not set forth in his report. So I do object to this.

THE COURT: Any response, Mr. Page?

MR. PAGE: Your Honor, this is a response in response to the cross-examination that used this -- these land uses and asked him about the differences.

MR. MCDANIEL: That examination, Your Honor, was simply the basic attributes of the two watersheds. Individual analysis of loading from those land uses was not part of the cross and it's not part of his report.

THE COURT: I think it opens the door to this and naturally demands this type of response.

Overruled.

Go ahead.

2.3

A. Anyway, if you take these average values and weight them according to land use, you come out with a value of about 21 micrograms per liter in the water going into Broken Bow and 32 going into Tenkiller. So I don't believe that land use alone explains the high concentration in the inflow of Tenkiller Reservoir.

Q. (BY MR. PAGE) And just to be clear, the 21 for Broken Bow compares to what we're actually seeing there now as what?

A. Twenty-seven.

- Q. And the -- what did you say for Tenkiller was --
 - A. Thirty-two.
- Q. Thirty-two compares to what we're actually seeing in Tenkiller?
 - A. 166.

2.3

- Q. Thank you, sir. Now, you've had chance this morning to talk about transectional sampling, and I believe you testified this morning --
 - A. Yes.
- Q. -- that you felt that the -- that even though there were some samples that were down the deep part of the watershed, that you also did transectional sampling in order to evaluate the littoral zones or the edges of the reservoir; correct?
- A. Right. We wanted to see if the profiles were taken in the -- at the main stations, if they could be extrapolated across the reservoir.
- Q. Would you just briefly describe what was done to evaluate that?
- A. There were, I think, six sites across the reservoir at the various stations, and if you plot these profiles from those different sites on top -- against each other, they fall -- they're very

similar in terms of oxygen and temperature. So it tells you that the thermocline is very constant horizontally at a constant depth across the reservoir.

This is typical in lakes. The thermocline is very stable unless there's extremely strong wind, and then you can get seiches in a large body of water that flop back and forth, but when the wind stops blowing that thermocline is very stable. In deep bodies of water like these reservoirs, you don't see the dropping of the thermocline until you start getting cooling in the fall then it — then they start going. Otherwise, in the summertime when you got that warm water in the top, they're very stable.

- Q. And you've testified you looked at Dr. Wells' modeling results of the temperature and DO?
 - A. I talked to him about it.
 - Q. Okay.

2.3

- A. Well, yes, I've looked at his -- his -- his oxygen temperature profiles.
- Q. Does that support your transectional analysis; that is, his modeling results support this transectional --
- A. Well, his model just doesn't predict. I mean, it's a hydrodynamic model that predicts the oxygen, temperature distributions throughout the

basin, not just at the individual sites where we monitored.

So that also helps describe the consistency of the horizontal distribution of oxygen and temperature?

- Q. Changing topics on you, Dr. Welch, you were asked about whether or not you looked at creel data as part of your evaluation of the fisheries; correct? Do you recall those questions?
 - A. Yeah.

2.3

2.4

- Q. Okay. I don't know if you had a chance to answer why you chose not to focus on the creel data that was available for Lake Tenkiller and Broken Bow. Would you please explain?
- A. Well, we did look at a lot of fisheries data, and there was there was not a consistent pattern that you could say that the sampling techniques and the effort were comparable across a long period of time.

And so we did a lot of work and plotted this information, but it just didn't allow us to -- to make any firm conclusions about -- about the status of the fishery.

Q. And finally, Dr. Welch, I think early on yesterday you were asked questions concerning whether

2.3

or not you validated Dr. Wells' modeling results, and you said you didn't look at the validations to my recollection.

Did you do anything yourself, sir, though, to evaluate the reliability of Dr. Wells' modeling results?

- A. Well, I did. I stated that in -- in deposition, as I recall, and also it's in our report, that my -- I mentioned yesterday when I showed that line diagram that evaluated the seasonal change in the volume of habitat --
 - Q. Which diagram are you referring to here?
- A. Well, it compared -- well, I can just tell you. It compared walleye, suboptimal, the volume for suboptimal conditions for walleye, the volume for optimal conditions and suboptimal conditions for smallmouth bass.
- Q. Okay, sir. Can I just make sure for the record, is it -- if you just look, is it Oklahoma Exhibit 733?
 - A. That's it, yeah.
 - Q. Okay. Thank you, sir. Please continue.
- A. So in the upper left-hand corner where there is suboptimal conditions, the June through -- the June through September average volume for suboptimal

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

18

19

20

21

22

2.3

2.4

25

7911

conditions for smallmouth bass is -- average for 2005-2006 averaged 25 percent for suboptimal. For optimal, it was ten percent for smallmouth. For walleye, it was less than 1 percent.

- Q. And that's based on your observations?
- A. That's on the observation data of 2005-2006.

Wells' model predicted for his ten-year average 8 percent for optimum for smallmouth, 33 percent for suboptimal, and one and a half percent for walleye. So those estimates were very close to what we calculated for '05 and '06.

So I thought, Wow, this looks good. I think the model is doing pretty good on oxygen and temperature.

MR. PAGE: Your Honor, I pass the witness.

17 THE COURT: One question before recross.

Dr. Welch, the last question that Mr. Tucker asked you was with regard to the record smallmouth bass and the record striper.

Snake Creek is on the lower eastern part of the lake. Looks to me to be probably the largest creek coming into the lacustrine.

THE WITNESS: Okay. Near the dam.

THE COURT: Yes. Relatively.

7912 It's -- it enters the lacustrine part of the lake. 1 2 Now, your answer to Mr. Tucker was that those 3 fish came out of this fishery, and I was surprised 4 frankly as to the answer because the striper came out 5 of the lower Illinois River below the dam and above 6 the Arkansas River. 7 THE WITNESS: That's what I found out 8 later. 9 THE COURT: Now, is that area considered 10 part of the same fishery? 11 THE WITNESS: I wouldn't consider it 12 part of the same fishery. 13 THE COURT: All right. Well, that's 14 why --15 THE WITNESS: You mean the tailrace 16 fishery? 17 THE COURT: Well, of course the tailrace 18 to my understand is essentially where they have the 19 trout. 20 THE WITNESS: The outflow, yeah. 21 THE COURT: Yes. And then the stripers 22 are in the lower Illinois above the Arkansas River. 2.3 Is that part of the same fishery in your 24 terms as that presented in Lake Tenkiller in the

Illinois River above Lake Tenkiller?

THE WITNESS: No. Different habitat.

THE COURT: All right.

Cross-examination -- or recross.

RECROSS-EXAMINATION

BY CHADICK:

2

3

4

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

- Q. Good morning, Dr. Welch.
- 7 A. Good morning.
 - Q. I want to make sure that I understand your testimony.

First of all, with regard to habitat -differences in habitat, prey availability, and
interspecific competition, that can affect the
smallmouth bass in the Tenkiller reservoir; correct?

- A. Yes, yes. Largemouth as well.
- Q. All right. And you did not study the differences in habitat, prey availability, or interspecific competition in either Tenkiller or Broken Bow; correct?
 - A. I did not study it, no.
- Q. Also making clear -- I think you said this yesterday in your deposition. You did not know whether Dr. Wells' model had been validated; correct?
- A. I don't -- let's see. I don't think it was validated.
- 25 Q. Okay.

- A. No. By "validated," I mean you take a whole new set of data and check the model against the whole new set of data. I don't -- I don't believe it was.
- Q. And Mr. Page asked you about your comparing the DO profiles -- and I just want to make sure that I get these right -- you had referred to in redirect State's Exhibit 721 and 728. Can you pick those up, please?
 - A. Yeah. I got them, I think. Yeah.
- Q. Okay. And so I'm looking first at State's Exhibit 721. Those are all profiles at LK-01 --
 - A. Correct.
 - Q. -- that site 01 in Tenkiller; correct?
- A. Right.

2.3

- Q. And then on State's Exhibit 728, there is the comparable site in Broken Bow, BBL-01, that's on the left-hand side of the page; correct?
 - A. Yes.
- Q. And for the year 2005 in Tenkiller at site LK-01, you ran -- I believe I've counted these -- 12 dissolved oxygen profiles; correct?
 - A. True.
- Q. And that was from the period of time from May 18, 2005, until November 16th, 2005; correct?
 - A. True.

- Q. And you are, as you described to Mr. Page, making a reference comparison of DO profile of
 Tenkiller to Broken Bow based upon one oxygen profile at BBL-01 in that same year, 2005; correct?
- A. Let me see. There are no profiles in 2005 from Broken Bow.
- Q. Look at the very last -- is that not October 17, 2005?
 - A. I didn't use that one to compare.
 - Q. You didn't even use it?
 - A. I used the July and August --
- 12 Q. Okay.

2.3

- A. -- to try to get dates that were similar in the two bodies of water.
- Q. So if I understand you then, you had 12 oxygen profiles run at LK-01 in 2005, and you compared that to zero dissolved oxygen profiles at BB-01 in 2005; correct?
- A. Yes.
- Q. And just in terms of that sampling, of course, the 2005 sampling was the product of work from CDM and none of your BBL profiles that you looked at was the result of sampling from CDM; correct?
- A. No, that's correct. We could look at October, though, if you want to.

Q. Well, I'm just wanting to make sure for purposes of your redirect examination to Mr. Page that I'm covering what I understand.

A. Okay.

2.3

2.4

- Q. And, again, you don't know about the sampling efforts and how they got these DO profile data for any of these years on State's Exhibit 728, right, because it wasn't CDM?
- A. Well, I mean, I see the results. They went out with a -- I mean, I don't know what kind of a probe they used, but these -- they measured oxygen with depths and they reported the results so I'm taking them at face value.
- Q. And then you had discussed yesterday about the habitat squeeze and your concern with the smallmouth bass being habitat-squeezed in June through August when growth is prohibited, in your opinion; correct?

MR. PAGE: Your Honor, this goes beyond the scope of my redirect.

THE COURT: I believe it does. I don't believe he went into that in redirect.

MR. CHADICK: Okay. I'm sorry.

Q. (BY MR. CHADICK) Let me just see if this hits on your direct. I was trying to lead up to it,

your redirect.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

24

25

Is April when that record smallmouth bass was caught the growing season?

A. They're going to -- the growth is temperature controlled so they don't -- they won't be growing at temperatures beyond 29 for sure and it will be -- be reduced.

And so as soon as — so temperature also keys when they reproduce. So when the temperature reaches some level in their optimum, then that's when they start to feed and reproduce. Well, I know crappie come in close to shore. The temperature is 60 degrees Fahrenheit when you start fishing. So it controls their reproduction and their growth.

MR. CHADICK: Thank you, Dr. Welch.

THE COURT: Further recross?

MR. MCDANIEL: Yes, Your Honor.

THE COURT: Mr. McDaniel.

RECROSS-EXAMINATION

BY MR. MCDANIEL:

- Q. Good morning, Mr. Welch.
- A. Good morning.
- Q. When you came down here, did you think you'd still be enjoying our fine city on Wednesday?
 - A. You know how long I've been here?

- Q. Yeah, I do.
- A. Yeah.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

- Q. I do. That's why I asked. And your tone of voice says it all.
 - A. I'm looking for my mail every day at the motel.
 - Q. Has it shown up yet?
 - A. My wife is not as mad as Cooke's is, though.
 - Q. Well, I'm sure he's going home a happy man so I -- all right. Let me touch upon a couple points.

With Mr. Page, he asked you whether the differences in watershed area explained the differences in the concentration of phosphorus in the streams.

- A. Uh-huh. Yes.
- Q. And you answered the question saying all else being the same, the watershed-to-lake ratio does not explain the concentration. Is that your testimony?
 - A. It is.
 - Q. All right. But --
- A. All other things being the same, like land use, you mean?
- Q. Correct. That's what I understood your testimony to be.
- 25 A. Right.

- Q. But if the question is phosphorus load, the mass of phosphorus that goes into the two reservoirs, all things being the same, watershed area, because there is a greater volume of runoff from a bigger ratio watershed, it does explain a difference in the load, doesn't it?
- A. If the land use were the same and the slopes were the same and all this, yes, you'd get more load.
- Q. Okay. These dissolved oxygen plots in your report that you've discussed, those were actually prepared by -- is it Dr. Santini or Drew Santini?
- A. Drew Santini. Either him or Brian Bennett.

 I'm not sure which one does this.
 - Q. From Camp, Dresser & McKee; correct?
 - A. Yes.

2.4

- Q. Did they actually provide you the actual results data from the dissolved oxygen?
- A. Yeah. We've got raw data from the DO. Everything we used in our report is in our appendix.
- Q. You mention this alternate process that you insisted that they run for dissolved oxygen. What did you call that?
- 23 A. The Winkler test.
 - Q. Winkler?
 - A. Goes back to 1800 and something.

- Q. All right. Did you actually receive the original raw Winkler data?
 - A. No, I have not received the raw Winkler data.
 - Q. Okay.

2.3

2.4

- A. It was used to, you know, compare and make sure they were close -- that the probe measurement was close. I mean, it's a way to standardize.
- Q. Okay. But they never provided it so you don't know what it shows?
 - A. No, I do not know what it shows.
- Q. Now, let's talk briefly about this analysis you did where you said you area-weighted three land uses -- forest, range, and urban -- between the two watersheds.
 - A. Uh-huh.
- Q. And if you understood your testimony, you applied sort of a standardized coefficient for runoff that you've either developed through your own research or from the literature?
- A. Well, I did that also but this was more simple. I just said, here are the concentrations in water running off of this land use, and I took those concentrations and weighted them for that amount of land use.
 - For example, the highest concentration 92,

for example, and there's 7 percent land use in urban area in Tenkiller. So I just -- I weighted it that way.

Q. Well, let's talk about the urban.

2.3

2.4

Now, obviously we've had several of the other state's experts have testified and we've talked about lots of different types of sampling and data that have been generated in the course of this investigation.

But my recollection of the testimony is that no one actually sampled urban storm water runoff in the Illinois River Watershed to either determine concentration or loading. Have you seen any such data, sir?

- A. Engel's -- as far as the rangeland, the range value I used was -- was 34. And Engel's cited some work from --
- Q. I want to know about measured data from this watershed. That's my question.
 - A. I don't know of any.
- Q. Okay. So what you used in this analysis you testified to with Mr. Page this morning was not based upon data from the Illinois River?
 - A. It was not.
- Q. Okay. Now, when you analyzed those -- or did your analysis of those three land uses, you didn't

consider the nurseries in the Illinois River Watershed, did you, sir?

A. I did not.

2.3

- Q. Now, when you gave your deposition in this case, you recall being asked about the big Greenleaf Nursery?
 - A. I do.
- Q. And at that time, you were not familiar that that facility existed in the Illinois River Watershed, were you?
- A. I think I said no. I can't remember what I said. I think I asked somebody afterwards. I asked Engel about it.
- Q. It's your understanding that that nursery sits right beside the lake up in the upper zone?
 - A. I assume that it does, yes.
- Q. Okay.
 - A. I actually haven't looked at it so I -- I know it's on the shore somewhere.
 - Q. Well, and you use this analysis of these three land uses in your discussion with Mr. Page to say that those three land uses don't explain the difference between 21 micrograms per liter in Broken Bow and 32 micrograms per liter in Tenkiller, can't be explained by those three land uses.

That was your testimony; right?

2.3

A. I didn't say that. I said I used -- I used the percentages of land use that were presented to Cooke and I by Robert Van Waasbergen, and they're in our report, and it's 7 percent urban and, I think, 43 percent forest, and the rest were pasture in Tenkiller.

I took those numbers and I was only trying to illustrate and discuss this issue of different land uses in the two watersheds as explaining the -- you know, aside from any other waste going on these lands and aside from wastewater or anything else, can this explain the difference between 27 and 166? That's the reason I did it. Just the expected runoff from those kinds of land uses, on average, doesn't do it.

- Q. All right. That's how I understood your testimony.
- A. Yeah. And no, it doesn't include any other kinds of sources.
- Q. Well, and that's -- that's my next question, sir.

That analysis that you just gave us doesn't consider the 31 million gallons a day of treated wastewater dumped into the streams of the Illinois River Watershed by the sewage plants versus --

7924 It does not. 1 Α. 2 0. -- the less than one-tenth of a million a 3 gallon a day in Broken Bow, does it? 4 It doesn't. 5 All right. Those are my questions. Thank Q. 6 you, sir. 7 THE WITNESS: Okay. 8 THE COURT: Any further recross? 9 MR. TUCKER: No, thank you. 10 MR. ELROD: No, Your Honor. 11 THE COURT: Doctor, one more question. 12 I presume I know the answer to this. 13 You've not done any follow-up on your 14 previous work at Eucha-Spavinaw, I take it; correct? 15 THE WITNESS: Correct. 16 THE COURT: And that wasn't an area you 17 were asked to look at in the context of this lawsuit? 18 THE WITNESS: True. 19 THE COURT: All right. Very well. You 20 may be excused. 21 The state may call its next witness. 22 MS. MOLL: Good morning, Your Honor. 2.3 THE COURT: Good morning. 2.4 MS. MOLL: May it please the court, 25 Judge, I'm sorry to say that this won't be nearly as

7925 fun as listening to Dr. Welch. 1 2 THE COURT: All right. 3 MS. MOLL: But there are two 4 stipulations that the state has reached with various 5 defendants that need to be reflected on the record. 6 THE COURT: All right. 7 MS. MOLL: Perhaps we could get through 8 those before our break. 9 THE COURT: Please. 10 MS. MOLL: And this will suspend the 11 need to move into evidence a handful of exhibits, and 12 this relates to certain of the state's claims 13 requiring proof that a defendant is a person or a 14 corporation. 15 THE COURT: All right. 16 MS. MOLL: So the first is -- and I 17 see Mr. George is in the courtroom. He has agreed to 18 stipulate on the record that Tyson Foods, Inc., Tyson 19 Chicken, Inc., Tyson Poultry, Inc., and Cobb-Vantress, 20 Inc. are corporations. I would ask Mr. George to 21 acknowledge his agreement on the record. 22 THE COURT: Mr. George. 2.3 MR. GEORGE: More Christmas spirit, Your 24 I struggled with that request but that's Honor. 25 agreed.

1 THE COURT: Thank you. Ms. Moll. 2 MS. MOLL: The second stipulation is 3 that Mr. McDaniel has agreed to stipulated on the 4 record that Peterson Farms, Inc. is a corporation. 5 THE COURT: Mr. McDaniel. 6 MR. MCDANIEL: It took us 12 e-mails, 7 Your Honor, but I agree. 8 THE COURT: Thank you. 9 MS. MOLL: It was close to 12. 10 Your Honor, we have another matter to take 11 I don't know if you want me to get into it now, 12 it's going to take some time, or whether or not you 13 want to take the morning break now. It's your 14 pleasure. 15 THE COURT: Well, why don't you give me 16 a heads-up on whatever it is. 17 Okay. The state would like MS. MOLL: 18 to move into evidence a series of records from ODAFF. 19 We do not have a foundation witness for it because we 20 have a declaration signed by Mr. Dan Parrish from 21 ODAFF pursuant to Federal Rule of Evidence 902(11). 22 So I'm happy to get into that now but it's your 2.3 pleasure. 2.4 THE COURT: All right. How many records 25 are we talking about?

2.3

This is

MS. MOLL: There are a couple dozen, I believe, Your Honor.

THE COURT: All right. And I take it here that there is no stipulation as to this matter; correct?

MS. MOLL: That is correct. We tried to obtain one but that was not successful.

Shall I go ahead and distribute the exhibits, Your Honor?

THE COURT: Please. All right. This is all regularly-conducted activity issues; correct?

MS. MOLL: Yes, sir.

THE COURT: And I take it that the defendants dispute whether or not the activities were regularly conducted?

MR. HOPSON: No. I think the activities were as regular as can be, Your Honor. I have a different objection.

THE COURT: All right.

MR. HOPSON: I have an objection that dumping in hundreds of pages of soil test phosphorus results that are not representative, not random, not a statistical sample, not tied to any expert testimony is simply irrelevant.

If they want to put these into evidence, I

United States District Court

can assure you they can put Mr. Parrish on the stand, ask him three questions, and they can come into evidence if you overrule my relevance objection. But at that point, I want to interrogate Mr. Parrish about how these documents were selected, who selected them, and what they're supposed to represent.

Because all we really have here is a selection by plaintiff's counsel of the highest STP soil test phosphorus results they could find on certain growers' farms. The same growers have very, very low soil test phosphorus results on other fields which also goes to the relevance of this whole exercise.

MR. TUCKER: Your Honor --

THE COURT: Yes.

MR. TUCKER: -- if I may be heard as

well.

2.3

In addition to the objection Mr. Hopson makes under Rule 106, which talks about the remainder of related writings, it's our position that that applies to if you have a grower file, then other documents in that grower's file are equally important as a part of the record that's being offered. The example given by Mr. Hopson was that — that growers would have a different STP, a lower STP on other fields.

2.3

2.4

example, on one of the exhibits the state choose to offer, that particular grower has a lower STP on that field for every year before and every year afterward one particular soil sample was taken, and lower by a factor of 90 percent, indicating a clear aberration for that one test. Yet, the state only proposes to submit the one test which clearly does not fit the rest of all the tests in that particular field.

Additionally, the way in which the state chooses to admit this, we believe that there is a -- it is a hearsay issue. Because if you look at the description of records of regularly-conducted activity, documents that are being offered by the state include, for example, a filing made by a farmer with the state which contains in there the farmer's understanding of a soil test received from yet a third party. So it's hearsay within hearsay which is going to be offered by this particular person.

Additionally, the --

THE COURT: Now, let me understand here.

You say the farmer's understanding of a soil test received from --

MR. TUCKER: A third party.

THE COURT: -- a private third party?

2.3

MR. TUCKER: That's correct. Or in many instances, it's Oklahoma State University. But that's the farmer's entry on an Oklahoma state form of data which he obtained from yet a third party, which is being offered by the state for proof of the matter asserted, which is the soil test phosphorus level on that particular field to demonstrate a high level at that time on that filing.

THE COURT: Well, remind me how these records are typically gathered. Does the state itself do these STP tests?

MR. TUCKER: No.

THE COURT: That was my recollection, that the farmer sends these out to the OSU labs and then the farmer reports those results back to the state; correct?

MR. TUCKER: That's correct, on the annual report the farmer fills out, which includes data which the farmer knows about. It also includes data which the farmer is merely using by reporting the hearsay from a third party.

THE COURT: Right. But that's the regular conduct of these records; correct? In other words, that's the way these records are put together normally?

2.3

2.4

MR. TUCKER: It is the regular -- the way these records are regularly performed, that is correct.

THE COURT: Well, what makes it unreliable?

MR. TUCKER: Well, I don't know that it's unnecessarily unreliable but it is hearsay within hearsay.

An example of the potential unreliability of it is the way in which the state chooses to offer it. By referring back to section 2, rule 102, in which they're offering only a particular slice of the record without any opportunity — the way it's being proposed by Ms. Moll, it's being offered without any opportunity to determine how that slice was selected and what the other slices of the pie look like.

THE COURT: Well, of course that goes back to Mr. Hopson's objection?

MR. TUCKER: Yes, it does.

THE COURT: And that's really a

different objection than hearsay.

MR. TUCKER: Those are two different objections, that's correct, Your Honor.

THE COURT: All right. Anything else?

MS. MOLL: Your Honor, if I may respond?

MR. WEEKS: May I speak, Your Honor?

THE COURT: Of course, sir.

MR. WEEKS: Thank you. On behalf of

George's, Your Honor, I would like to simply reiterate

5 | what has already been brought to the court's

6 attention, and that is that the documents that the

7 state seeks to introduce here are selective and

8 cherry-pick documents from some -- not all -- but some

9 of the various growers in the Illinois River

10 Watershed. So what we're seeing here is not

11 representative of anything other than STP levels by

12 | which the state would like to misrepresent the facts

13 to the court.

1

2

4

14

15

16

17

18

19

20

21

22

2.3

2.4

25

And as I understand it, Rule 106 requires fairness in the introduction of these kinds of documents. And so to the extent that the state is interested in STP levels that exist in the Illinois River Watershed, then I would strongly urge the court that fairness would require that all of the records come in, and specifically all the records as it relates to -- all the STP level records as it relates to the growers that the state is attempting to use here.

In addition to that --

THE COURT: Well, even if that were the

case, it arguably wouldn't be a random or statistically-selected sampling.

2.3

MR. WEEKS: It would not, Your Honor.

But, however, with regard to that grower who's going to be painted with some brush here today --

THE COURT: You're saying at the very least, all the records relative to that grower ought to be presented?

MR. WEEKS: That particular grower, that's correct.

THE COURT: But that doesn't address all of Mr. Hopson's objection, 106 objection.

MR. WEEKS: It does not. And the question of relevance is still there and the question of the fact that they may and probably are misleading in that respect is still there.

I'm not necessarily urging that on the court.

I'm just pointing out in the -- if the court does

decide to accept some of these documents, that in

fairness that would at least be one option or

alternative.

I would like to further point out that with regard to George's the state has selected documents from a grower by the name of Martin Bayer, B-a-y-e-r.

Now, Mr. Bayer's documents are all

2.3

indicate -- all indicate that he is located in the Eucha-Spavinaw Watershed. And so for that reason, these documents are certainly not relevant here in this proceeding.

Now, when we brought this to the attention of the state, what we were told was, well, you know, we're going to bring Mr. Parrish in here and by fiat he is going to declare that no, Mr. Bayer is now in the Eucha -- or in the Illinois River Watershed.

Well, you know, Mr. Parrish ain't here today and they say he ain't going to be here today. And so, you know, we have the question of, you know, where is Mr. Bayer's farm and why is it now that they want to put those records in? Furthermore --

THE COURT: My recollection is that these forms themselves identify which watershed the farms are in.

MR. WEEKS: They do indeed, Your Honor.

THE COURT: Have you looked at the records that the plaintiff seeks to introduce to see --

MR. WEEKS: It says "Eucha" right on his farm management plan, "Eucha."

THE COURT: Okay.

2.3

that farm.

MR. WEEKS: But as I said, we were -- we were informed that Mr. Parrish was going to appear here today and declare that no, he's not in Eucha, but rather he's in the Illinois River Watershed.

I would further point out -- and the state knows this as well -- that the reason they want this guy in here is because he has one field that has a high STP level that was determined in 2002 when Mr. Bayer was actually buying the farm. He had no history with that farm. George's has no history with that farm.

The only history is that there was an attempt to purchase -- or he did purchase this farm in 2002, and on a field there was a high STP level. Now they want to hang that value on our neck and that's unfair.

THE COURT: Is he a George's grower?

MR. WEEKS: He is indeed a George's

grower, and has been since 2002 when he bought the

farm. But the STP level predates him ever purchasing

THE COURT: You say your understanding is that he's in Eucha-Spavinaw?

MR. WEEKS: That's what the state's documents say.

THE COURT: Does it straddle the

watersheds.

1

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

24

25

2 MR. WEEKS: It doesn't say it straddles 3 the watershed.

4 THE COURT: All right. Anything further?

5

MR. WEEKS: Nothing further, Your Honor.

THE COURT: Okay. Any other objections?

Ms. Moll, you stirred things up.

MS. MOLL: Mr. Elrod promises this was going to be a dust-up and it is indeed.

MR. TUCKER: My lawyer advised me, knowing me for the scholar that I am not, that I missed the main point of this whole issue.

THE COURT: I've been accused of the same, Mr. Tucker.

MR. TUCKER: He suggests that I direct the court's attention to Rule 902 having to do with self-authentication, and in particular subparagraph (11), which has to do with certified domestic records of regularly-conducted activities which is what it is the plaintiff wants to do here.

The point is made that it's required that the certification be made by a person who has the ability to certify that the record was made at or near the time of the occurrence of the matters set forth or

7937 from information transmitted by a person with 1 2 knowledge of those matters. And it's pointed out that 3 Mr. Parrish is not and cannot be that person. 4 Thank you, sir. 5 THE COURT: And remind me of 6 Mr. Parrish's position. 7 MR. TUCKER: Mr. Parrish is --8 MS. MOLL: As you can see, Your Honor, 9 on the declaration that he signed, he says, "I am the 10 director of agricultural, environmental management 11 services for the Oklahoma Department of Agriculture, 12 Food and Forestry." 13 THE COURT: Now, where is that in this 14 document? 15 MS. MOLL: Oh, I'm sorry. Forgive me, 16 Your Honor. It should be on the inside cover of the 17 binder. 18 THE COURT: Oh, here it is. So he's the 19 director. 20 MS. MOLL: And he goes on to say -- and 21 I'm still in the first paragraph on the third line --22 I am the custodian of ODAFF's records kept under the 2.3 Oklahoma Registered Poultry Feeding Operations Act and 24 the Oklahoma Poultry Waste Applicator Certification 25 All of the facts stated herein are based on my

personal knowledge of ODAFF's recordkeeping practices.

2.3

MR. TUCKER: And he would know that,

Your Honor, with regard to ODAFF's recordkeeping

practices but he would have no knowledge of how, when,

or under what circumstances the document which he

chooses to certify was made as to the time it was done

or whether the person who made it actually had

knowledge of those matters. It would only be the

person who had made the record.

The comments of that rule points out and Weinstein points out that has to do with records that are generated and kept by the agency, as opposed to something that comes in from the outside.

THE COURT: All right. It wouldn't necessarily be the person who made the record, it would be the person who gathered the record or was the actual custodian in your view?

MR. TUCKER: Well, no. For example, with respect to the agency, he would know that this is the kind of record that is prepared by -- ordinarily prepared by a member of his agency, not by some outside person. He could then certify that that's something that -- he would know that because he would know that his person does it, does it when the call

2.3

comes in, the call log is prepared, and then the call log is preserved. For example, a 911 log is a good example of that. The director of that agency would know how that's done.

This is like someone mailing in 911 records from somebody's house scattered in various parts of the countryside. He would have no idea who actually made it, who actually completed it, and under what circumstances or when it was done. So he would not have the ability to do that.

That self-certification is intended to certify records of the agency. It is not intended to certify records that come into the agency from someplace else.

THE COURT: All right. Well, let me recess, we'll take a look at 902(11) here because this is hitting me cold, and I'll try to get a better grasp of the outlines of 902(11) and 106 and we'll be back when that's done.

MS. MOLL: Thank you, Your Honor.

(Short break)

THE COURT: Ms. Moll.

MS. MOLL: Thank you, Judge. So quite a few objections obviously have been lodged before I got too many words out, so if you'll bear with me as I go

7940 through them. 1 2 THE COURT: Yes. 3 MS. MOLL: So the first objection that I 4 heard was on relevance grounds. These documents -- I 5 want the record to be very clear on what these are. 6 As Your Honor knows, ODAFF maintains what 7 we've been calling grower files and -- I'm not hiding 8 This is a subset obviously of grower files. 9 The --10 THE COURT: I didn't even hear relevance 11 as an objection frankly. 12 MS. MOLL: Mr. Hopson did. 13 MR. HOPSON: I did. 14 THE COURT: All right. Go ahead. 15 MR. HOPSON: Probably not very 16 effectively but I intended to lodge that. 17 THE COURT: All right. 18 MS. MOLL: So this is a subset of grower 19 files and they're relevant --20 THE COURT: Excuse me. Mr. Overton, 21 having many more years of experience than any of us 22 here frankly in the courtroom, suggested that we refer 2.3 to what we're talking about. 2.4 These are Exhibits 2644-A and --25 MS. MOLL: Your Honor, there's quite a

7941 long list. I'm happy to go through the numbers for 1 2 ease of the record, if you'd like me to. 3 THE COURT: Well, there are quite a few. 4 Let's do that here. 5 MS. MOLL: Okay. 6 THE COURT: 2660-A, 2685-A, 2686-A, 7 2688-A, 2690-A, 2695-A, 2703-A, 2707-A, 2729-A, 8 2730-A, 2739-A, 2740-A, 2768-A, 2772-A, 2774-A, 9 2780-A, 2798-A, 2815-A, 2821-A, 2825-A, 2830-A, 10 2831-A, 2835-A, 2847-A, 2855-A, 2856-A, 2857-A, 11 2858-A, 2860-A, 2861-A, 2864-A, 2868-A, 2879-A, 12 2880-A, 2885-A, 2890-A, 2891-A, 2899-A, 2907-A, 13 2914-A, 2926-A, 2928-A, 6063-A, 6942-A, and Cargill 79 14 and Cargill 87. 15 Does that cover it? 16 MS. MOLL: There was one, I think, you 17 may have missed at the beginning, Your Honor. So just 18 so the record's clear, it would be the first --19 THE COURT: All right. You're right. 20 MS. MOLL: The first two are Oklahoma 21 Exhibit 2565-A and 2644-A. I think you may have 22 skipped one of those. 2.3 THE COURT: All right. Thank you very 24 much. Just so the record's clear. Go ahead. 25 MS. MOLL: Okay. So on the relevance

point, what we have selected and are moving to admit are a subset of these grower files. What they show is soil test results of poultry-growers in the IRW with STPs in excess of any agronomic need, which supports the state's contention which poultry waste has been overapplied in the IRW. These records link a particular grower to an integrator and so I think that the relevance quite frankly should be obvious.

If I could take a step back, Your Honor, and give you a little bit of background on these type of exhibits and how we got to where we are, I think it might be helpful.

THE COURT: All right. First of all, the relevance objection is overruled.

Go ahead.

2.3

MS. MOLL: So during the motion in limine proceedings, which seems like years ago by now quite frankly, but there was an argument about kitchen sink exhibits. I don't know if Your Honor recalls that.

But one of the defendant's arguments was that there was numerous exhibits on the state's exhibit list which they described as kitchen sink exhibits, that there was no way that these exhibits would be offered in their entirety simply because of their

volume.

2.3

During that hearing, one of the defendant's counsel argued that the ODAFF files fell in that category. And moving ahead a little bit -
THE COURT: But there's a balance quite frankly.

MS. MOLL: Of course.

THE COURT: I mean, let's cut to the chase. I mean, obviously ODAFF records might fill a couple of rooms.

MS. MOLL: That's right.

THE COURT: They're absolutely impossible for one fact-finder to deal with. The question is really a 106 question: What in fairness needs to be produced here? And there seems to be a bit of a difference of opinion amongst defense counsel.

Now, with respect to counsel's request that the person be brought here personally, obviously as to 902(11), if I had Mr. Hopson's cross-examination skills, he could cross-examine Mother Teresa and make her look bad. I understand his desire to cross-examine, but obviously 902(11) allows a custodian to make a written declaration. So 902(11) permits this exercise. It would appear to me that

that objection needs to be overruled as well.

2.3

The question here really cutting to the chase is 106. I understand we don't want the kitchen sink here, but the question is — and there's a lot of discretion under Section 106 as to what in fairness should be presented to show a fair and representative picture.

It seems to me from the few minutes that I've been given during the break to discuss with a couple of the bright minds back in chambers, it seems to me that instead of a statistically representative sample, which would frankly take you all quite a bit of time to try to develop in terms of how that should be done, it would seem to me frankly that the complete file as to the growers that you want to present a picture about ought to be presented.

What's your response there?

MS. MOLL: My response to that, Your Honor, is the defendants are free to call Mr. Parrish in their case and --

THE COURT: But that's not what 106 says. 106 doesn't impose that burden on the other side. All 106 requires is that they show that, A, the truncated version is misleading; and secondly, the material required to be admitted for completeness. I

think they've already done that.

2.3

MS. MOLL: Well, my response, Your Honor, would be that what you have in your binder before you with all the exhibits is not misleading because it reflects the purpose for which they're offered. They are simply offered for the reason I stated, which is to show excessive STPs.

I don't think we're under any obligation to do any kind of, you know, sampling or anything like that.

THE COURT: I'm not saying you are. I'm saying that it appears to me that with respect to these growers, because given the insight that you've given the court from what's been presented thus far, it's not necessary that you — that you show a representative sampling because obviously you may have excess application of poultry litter in this area, whereas the field next to it may be pristine, and if you're correct, you have phosphorus coming off that field in runoff arguably making it to the stream, the reservoir.

So you don't have to show a representative sample from across the IRW. It just seems to me you need to be able to show me the complete picture with regard to that grower to, in fairness, address the

considerations presented by Mr. Tucker. There's been testimony here that the sampling STP tests aren't always perfect, that you may have a flier in terms of a test.

It seems to me that, in fairness, you ought to present records with regard -- and the complete records with regard to that particular grower so we can get a fair picture of what's happening as to that grower.

I was presented this at 11:10, and having looked a little bit at Weinstein, that seems to me, Section 106.02(1), that fairness requires presentation of all records from those growers referenced by the records to give a complete picture of the truth as to STP loading by that grower.

Mr. Hopson.

2.3

MR. HOPSON: Just a quick observation, Your Honor.

When you say "all records," I take it you mean all STP soil test phosphorus records in the grower files? And I raised this because of the burden on the court.

THE COURT: No. That's what I intended, yes.

MR. HOPSON: All right. That's just a

point of clarification.

2.3

MR. TUCKER: Your Honor, if I may, as a part of that point of clarification, one of the issues that's raised by the state, for example, Ms. Moll said we want to show that they have high STP litters caused by the application of poultry litter.

For example, with regard to one of the growers that they have listed in the long list of exhibits they read to you, they do indeed show a high STP record. But not in the STP records, but in the grower's annual registration forms it shows no litter as been applied to that field. So the state's conclusion would be invalidated by the balance of that grower's file.

But that would not be contained just in the STP records, that would be contained in the grower's annual statement. It's more broad than just the STP records.

THE COURT: Well, how far back do the STP records exist, Mr. Tucker?

MR. TUCKER: Well, the statute went into effect in 1998, and the grower records — the grower files essentially began following that time when the grower first made an application — I mean '98 — when the grower first applied for a Nutrient Management

7948 Plan. 1 2 By way of --3 THE COURT: Have you looked at that 4 particular grower's file? 5 MR. TUCKER: Yes, Your Honor. 6 THE COURT: All right. And you're 7 saying from the very outset there are high STP 8 results? 9 MR. TUCKER: The first soil test showed 10 a high STP result. And then all the years that 11 follow, one of the things that we would have presented 12 to Mr. Parrish, if the state offered Mr. Parrish, to 13 let him look at each of the reports as filed and 14 approved by the state inspector every year since that 15 first soil test that demonstrates that litter has 16 never been applied to that property. 17 THE COURT: Well, it doesn't mean that 18 litter wasn't applied before; correct? 19 MR. TUCKER: No. But there's no 20 evidence that it was. 21 THE COURT: Right. And I understand we 22 don't have complete records going back to the 40s. 2.3 The Garden of Eden for this MR. TUCKER: 24 project starts with each grower when they apply for 25 their Nutrient Management Plan. That would be the 7th

7949 day. 1 2 THE COURT: Go ahead. 3 MR. WEEKS: I would just point out to 4 the court that in addition to the STP results 5 themselves, that there are other documents in the file 6 that I think are relevant and important to the case. 7 For example --8 THE COURT: Well, they may be relevant 9 to the case. But the question is, what would be 10 required for completeness as to this issue? 11 MR. WEEKS: Well, I think in fairness, 12 it would be imminently fair to take into account the 13 documents that the state has -- where the state has 14 undertaken to audit this farm and point it out that 15 this farm and its Nutrient Management Plan is in 16 compliance with state law and that this particular 17 grower and this Nutrient Management Plan has protected 18 against runoff. That's at the very heart of this 19 case. 20 And so I think in fairness, in addition to 21 those STP levels, whatever they may be, high or low, 22 that it would be important that the state has 2.3 considered that and made that determination. 2.4 THE COURT: What do you call those? STP

25

audits?

2.3

MR. WEEKS: They are farm audits, Your Honor, annual farm audits.

THE COURT: Well, Mr. Hopson was just suggesting that anything beyond the STP records isn't required.

MR. WEEKS: Well, Mr. Hopson and I disagree in that respect then. Because I think these are very — I think in light of the fact that the state wants to put in certain fields that have STP levels that they consider to be high, that in fairness it ought to be shown that despite the fact that there may have been a high STP level, that the state was on that farm and on that year and determined for itself that there was compliance with the Nutrient Management Plan and that the Nutrient Management Plan of this grower was protecting against runoff.

THE COURT: Before I go back to

Mr. Moll, Mr. Hopson, do you agree that for

completeness, that any farm audits with respect to

these particular growers be provided?

MR. HOPSON: Here's what I think, Your Honor.

They produced to us and we looked at the complete grower records for these 50 growers. As I recall, they filled three and a half boxes, okay? And

2.3

I'm not going to stand up here and suggest that we ought to move three and a half more boxes of documents into evidence.

I think you hit the right point by saying, if you want to look at STP records, let's look at all the STP records that are in the grower's files. That seems to be a reasonable compromise.

With all due respect to Mr. Weeks, if there are particular documents that Tyson or George's or anybody else finds in these files that we think are relevant, we can move them in in our case in chief because I've just heard a representation here that they're business records; that is, assuming your ruling that these are business records and admissible on that ground.

THE COURT: Right. Now, as to the volume with respect to these, you say, 50 growers, what's the volume of that document -- of that documentation, should they be required for fairness?

MR. HOPSON: I would think that if -- and Ms. Moll can correct me -- but I would think that the average grower has something like ten to twenty, maybe thirty STP test reports in their file. Depends on how many fields they have and how long they've been registered.

2.3

But say a grower's got three fields. That's about average in the IRW. Ten years of registration means thirty STP reports in that grower's files. Some of the big growers, you know, may have eight, ten fields, and you're going to see a bigger volume. But it's not going to much more than double the volume of the paper that's going to be moved into evidence.

THE COURT: All right. Ms. Moll, I need to give you an opportunity.

MR. WEEKS: I would just say, Your Honor, in the spirit --

THE COURT: Well, let me go to Ms. Moll here.

MR. WEEKS: Okay. I'm sorry.

THE COURT: Go ahead.

MS. MOLL: Your Honor, you can appreciate that the grower files are enormous, and the defendants obviously have other documents in mind that they want to include in this proffer.

I think the easiest way to handle this would be for them to identify what documents do they want included in connection with these particular grower files. Because otherwise, I think we're going to have as a mechanical matter a difficult time, you know, quickly organizing ourselves and doing that.

2.3

But obviously the defendants have certain documents that they want authenticated, and I don't know that Mr. Parrish could sit on the witness stand, you know, be handed a document by Mr. Hopson, and testify under oath that yes, you know, out of the blue, looking at this document, this is a business record from ODAFF, without being able to compare it to what's in the grower files at ODAFF.

THE COURT: Well then, he's an improper custodian. But frankly that technical objection strikes me cold.

You know, there are some authority for the proposition that if there is a signed certification by the public officer with actual custody of the documents, there is no need for further certification that the custodial authority was delegated to that person from the head of the department or agency entrusted by law with custody of the documents. Here, we've got the head of that particular agency, ODAFF; correct? So it seems to me that technical objection, I think, raised by Mr. Tucker should be overruled.

But the question is, what in fairness to satisfy the rule of completeness ought be required here? And I agree, Mr. Hopson has suggested a balance here that instead of, you know, three and a half box

2.3

loads' worth of documents and requiring you to do the defendants' work, perhaps to the extent that you're wishing to show the court a portion of the truth relative to STP results from these fields, it would seem to me that the balance suggested by Mr. Hopson may be the right balance, that what we need to see is the STP results as to these growers during their history of presenting or filing these records with ODAFF.

Any objection there, I mean, since Mr. Hopson suggests that it will not be nearly as great a volume as all of the records relative to those growers?

MS. MOLL: Your Honor, if I can have a moment to confer with Mr. Garren.

THE COURT: Yes.

MR. HOPSON: And, Your Honor, while she's conferring, I've been whispered to by several of my smarter colleagues here that suggests that maybe mechanically the way to do this is for us to begin our case, go ahead and put in a 24-, 25-D that will contain the soil test phosphorus results we want.

For example, if Mr. Tucker has a particular, you know, single document that he thinks is important for the case to see, or Mr. Weeks has a particular audit inspection report, we'll include that. And then

2.3

the court will have, you know, two parallel sets, if you will, of the soil test phosphorus results that we want you to see and perhaps a selected handful of other documents.

THE COURT: Well, except if I sustain your rule-of-completeness objection here, or argument, then we don't have to have two partial subsets of the entire picture; right?

MR. HOPSON: True.

THE COURT: It seems to me that --

MR. HOPSON: True.

and once again, so often, because I know you all have tried lots of cases, but, you know, I'm coming up to 300, and so often you get these extreme positions.

And so from my simple-minded approach here, instead of getting the extremes on both sides of what you consider to be representative samples, perhaps what we ought to look at is the truth, which covers not only the extremes but the middle ground as well.

MR. TUCKER: Your Honor, speaking for Cargill, may I adopt Ms. Moll's suggestion? I believe it makes the greatest sense because, for example, with regard to those Cargill growers that are in their list, the state intends to offer more than just STP

results. Her --

2.3

THE COURT: I saw that. We have more than STP here, yes.

MR. TUCKER: That's correct. And her suggestion was that the defendant, at least as to this defendant, Cargill, we would be more than happy to identify those exhibit numbers that we believe should be included to make the exhibit complete for the court and that would — that would resolve the issue —

THE COURT: Well, how do you satisfy my concern that all I'm getting is extreme examples representing the two ends of the -- the two ends of the continuum?

MR. TUCKER: I understand your concern.

Of course I can promise to be reasonable but -
THE COURT: Well, you're an advocate,

Mr. Tucker. I mean, you're an advocate.

MR. TUCKER: Yes, sir.

THE COURT: As is Ms. Moll. I mean, that's why it seems to me that the rule of completeness is there.

Mr. Hopson.

MR. HOPSON: Yeah. And what I was going to just suggest, Your Honor, is that if you want to satisfy the rule of completeness -- and I agree that

you should $\operatorname{\mathsf{--}}$ we should put in all the STP results. But what I was getting at was an administrative issue.

If Mr. Tucker -- and I'm not picking on Mr. Tucker who I like very much -- but if he wants five more pages in one of these grower files. I was struggling towards a way where the court could have one grower file that has all the STP results, has the pages that the plaintiffs want, and has the pages the defendants want, rather than technically satisfying the rule of completeness today and then having miscellaneous excepts from grower files admitted in the record later.

Maybe that's not a goal that's worth pursuing, but that was all I was trying to suggest, is maybe we could get together for the court one grower file, including all the STP results for that grower.

THE COURT: You're saying one grower file for each of the 50 that --

MR. HOPSON: Right.

THE COURT: Ms. Moll, your thoughts

there?

2.3

2.4

MS. MOLL: I guess I'm hearing a lot of different suggestions, Your Honor, so forgive me.

THE COURT: Yeah.

MS. MOLL: Obviously, we're coming to

2.3

the end of the state's case, and I am happy to work with Mr. Parrish in trying to gather the STP reports for the growers that we've identified. I'm trying to think, though, as a practical matter and as a timing matter, how do we get that done in a manner that makes sense?

THE COURT: Well, we can leave the state's case open and take arguments after the rule of completeness has been satisfied. I mean, that's how you do it mechanically.

MS. MOLL: And that would be fine, if that's what the court wishes.

THE COURT: Well, we've done it many times. We have to try to be practical here.

But Mr. Tucker is correct, you're not only wishing to admit ODAFF records that are STP test results, but other records as well; correct?

MS. MOLL: I think the two exhibits that Mr. Tucker is referring to are those Cargill exhibits that came in at the end. And so to avoid any objection, at least from the Cargill defendants, we decided to move to admit two exhibits that were on their trial list. It happens to be that those exhibits contain more than STP results.

THE COURT: Why don't I allow you all to

2.3

get your heads together and -- my thought is, at least with regard to STP results as to these 50 growers, I want to see everything since '98. If you want to throw additional records in for a convenience, I have no objection to that.

But it seems to me that at least as to the STP results, I want to see the history. And I want to get a sense, if I grab one of those grower files, to how consistent those STP tests are with regard to field No. 2 on Farmer Jones' property. You know, I want to see if, for instance, farmer Jones, although prohibited from putting on any poultry litter, is going from a 350 STP to a 450 despite being prohibited in applying poultry litter.

That's what I'm interested in seeing, so that's why I want to see all the records. I want to see them because they may cut either way here. But if the plaintiff wants to present STP records with regard to 50 growers, fine. But my ruling under 106 is you're going to provide me all those ODAFF STP records since '98, since inception.

Mr. Tucker.

MR. TUCKER: Your Honor, by implication of what you're saying, you also want to be able to validate that litter has not been applied to the

property, which would mean that you would need to have the annual filing that demonstrates whether litter was either or whether it was shipped out or sold, which is a separate document but it's also contained in the same file.

MR. HOPSON: It's referred to as the annual inspection report by Mr. Tucker.

MR. TUCKER: That's correct. But there is only -- would be only one of those for each grower for the year, and they would match up with the STP numbers of the state.

THE COURT: I'm not going to make the plaintiff include those unless there are annual inspection reports in this binder that I have here.

Are there such reports here?

MS. MOLL: I don't believe so, Your Honor, but I cannot guarantee that. I don't believe so.

THE COURT: All right. The plaintiff seeks primarily to present me soil test phosphorus — or soil test reports. I see also we have renewal registrations here.

What's the significance of providing me some renewal registrations and not others?

MS. MOLL: The purpose of the various

2.3

2.3

submissions within each exhibit, Your Honor, are just those documents that would tie a grower to an integrator. And then there are also times where within one grower file, you will see property being transferred from one grower to another but it's the same land.

And so you might see within the documents we've provided you paperwork for reflecting such a transfer but it would relate to the same land.

THE COURT: All right. So instead of growers, really what we're looking at is 50 grower operations?

MS. MOLL: I think that's right, yes.

THE COURT: All right. For instance,

I'm looking at No. 2861-A. And in addition to an STP report and a renewal registration invoice, there's correspondence from Mr. Parrish to Mr. Nubbie,

N-u-b-b-i-e, in Westville, Oklahoma.

MR. GARREN: If I might answer your question about that, Judge.

THE COURT: Yes.

MR. GARREN: If you look at the soil test that has no name on it, the correspondence ties to the STP level. Of that soil test to Mr. Nubbie because not -- because of the name is not on the soil

2.3

test itself. They came from his grower file. So if you read the letter, it will identify the STP level that's on the soil test and identify it to Mr. Nubbie. That's the reason why that's in there.

We've tried to link where there wasn't a name or different name in the event of a transfer, that that soil test, in fact, goes to that grower file in the ODAFF records.

MR. TUCKER: Your Honor, I guess that goes to prove the point I'm trying to make is, you can't view these — these files are not maintained in the perfect fashion. That is to say, there are lots of tag ends and related letters and correspondences to make sense of a particular grower's operation.

You really need to see the annual report, as well as the correspondence that goes with it, as well as the STP reports. It doesn't -- it doesn't constitute a significant material addition in the number of papers, but it is to the issue area and the issue of completeness.

THE COURT: Well, but Mr. Hopson suggests that in terms of that degree of completeness, we're talking about three and a half legal boxes full of documents. I don't know about you, but I've got other cases to attend to. I'm not going to go through

2.3

every document in three and a half legal boxes full of documents. It's humanly impossible, Mr. Tucker.

MR. TUCKER: With respect to Mr. Hopson,

I think his estimate is more like our discussion of
the size of fish.

MR. HOPSON: I'm a fisherman, but I take offense to that. I looked at every one of those documents.

MR. TUCKER: If we were to add, for example, the annual reports for all the defendants and all the growers that are in there having to do with Cargill, you would have a very small amount of paper to the entire mass.

MR. HOPSON: May we confer?

THE COURT: Yes.

(Discussion held off the record)

MR. TUCKER: Your Honor, Mr. Hopson suggests that I just apply that to Cargill because I seem to be the one that wants to do that. I would ask if counsel objects to that; if she does not, perhaps we can reach accommodation.

MS. MOLL: If it's limited to Cargill,

I'm happy to do that. I'm just trying, Your Honor, to

-- we're happy to live with your ruling obviously.

And if it's limited to STP tests and the addition by

Mr. Tucker, we can do our best to complete that as quickly as possible.

2.3

THE COURT: Mr. Weeks, I think you wish the same accommodation. Mr. Weeks.

MR. WEEKS: Well, OF course, I've argued vigorously for the introduction of those, and we only have three growers and so it wouldn't be like we're dumping into the record.

But I think I do have a special case with Mr. Bayer, Martin Bayer. And to the extent that the court is going to permit them to put in those STP records, despite the fact that in every inspection checklist from 2002 to 2005 he's listed in the Eucha-Spavinaw Watershed --

THE COURT: Well, if he's in Eucha-Spavinaw, then you don't have anything to worry about, do you?

MR. WEEKS: Well, I don't think I would have, you know, but they haven't conceded that point yet and the court hasn't ruled quite yet.

So, I mean, I would just say that in the event that the court does permit that in, I think that these -- these checklists would be significant to make that record complete to show that they are in the Eucha-Spavinaw Watershed.

2.3

Furthermore, as Ms. Moll made her argument today, she said this was a subset of growers and these STPs indicated that there were levels in the watershed that had exceeded the agronomic rate and that linked it to an integrator.

With regard to this particular grower right here, they didn't do that and it doesn't do that. And so, again, for that reason, too, I would ask that the Bayer document be excluded altogether

THE COURT: What about Bayer? We haven't specifically talked about that, Ms. Moll.

MS. MOLL: If I'm thinking of the correct grower, Your Honor, there are certain documents where Eucha-Spavinaw is identified in error, but where you look at the property, it is, in fact, I believe, within the IRW.

So I think that's probably an issue to be argued another day once these documents eventually come in, but I don't know that Mr. Weeks' concern needs to be addressed right now.

THE COURT: All right. How do we determine that as a matter of evidence?

MS. MOLL: Well, I guess my thinking on that is, if we're going to go through this next step with the ODAFF records, we can take another look at

2.3

Mr. Bayer and provide the court with enough linkage between grower, integrator, and documents that reflect that he's in the IRW.

THE COURT: Yeah. I'm not -- Mr. Weeks, if the plaintiff contends that Eucha-Spavinaw is placed on these records in error, although they may not meet their burden of proof with regard to this particular grower, Bayer, I'm not going to preclude them at this juncture from attempting to -- from placing these into evidence.

Ms. Moll, will you accommodate Mr. Weeks, as you did with respect to Mr. Tucker, as to the additional documents that Mr. Hopson and the other defendants do not wish to include for Rule 106 purposes?

MS. MOLL: If the checklist that

Mr. Weeks has identified is, in fact, in the grower

file for those George's growers, I'm happy to include

it.

THE COURT: All right. Let's do that. I'm going to give you some time here to tie up the loose ends on that.

Is there anything else to put this thing to bed?

MS. MOLL: I don't think so, Judge.

THE COURT: All right. Let's see if we can approach it along those lines.

And the Rule 106 objection as to what's been presented thus far is sustained subject to tying this all up along the lines that we've been discussing.

Anything else?

2.3

MS. MOLL: No.

THE COURT: All right. How close are we, Mr. Bullock?

MR. BULLOCK: You know, I'm surprised you even call on me on this. I have such low credibility, at least in my own eyes, on this subject.

THE COURT: Well, you have higher credibility in my eyes. Go ahead.

MR. BULLOCK: Well, thank you.

We have one deposition and I will call the final witness, Mr. Todd King, and that will be about a 30-, 45-minute exam. That one I feel pretty confident in my estimate on, but we have one deposition to read and then we will rest.

THE COURT: Did we not have two experts that we had to let go and that were going to be called back? I understood that the defendants had waived cross on one of those but not as to the other.

MR. BULLOCK: Dr. Engel was the other

United States District Court

one that we had to call back whose cross was interrupted, and we called him back and got that completed. THE COURT: You're right. Thank you. All right. Let's take our recess. We'll be back in an hour and fifteen minutes, which will be 1:10. (Lunch recess was taken)

7969 1 CERTIFICATE 2 3 4 I, Brian P. Neil, a Certified Court Reporter 5 for the Eastern District of Oklahoma, do hereby 6 certify that the foregoing is a true and accurate 7 transcription of my stenographic notes and is a true 8 record of the proceedings held in above-captioned 9 case. 10 11 I further certify that I am not employed by 12 or related to any party to this action by blood or 13 marriage and that I am in no way interested in the 14 outcome of this matter. 15 16 In witness whereof, I have hereunto set my 17 hand this 9th day of December 2009. 18 s/ Brian P. Neil 19 Brian P. Neil, CSR-RPR, CRR, RMR 20 United States Court Reporter 21 22 2.3 2.4 25